

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

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Ex parte MASAJIRO IWASAKI

Appeal No. 2005-0445
Application No. 09/559,255¹

HEARD: JUNE 7, 2005

Before RUGGIERO, LEVY and SAADAT, Administrative Patent Judges.
SAADAT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1-18, which are all of the claims pending in this application.

We reverse.

BACKGROUND

Appellant's invention is directed generally to a method for high speed displaying a plurality of images that are similar to each other. The method is capable of displaying the resulting

¹ Application for patent filed April 27, 2000, which claims the foreign filing priority benefit under 35 U.S.C. § 119 of the Japanese Application No. 11-120946, filed April 28, 1999.

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images according to similarity measures from a feature space when those features cannot be represented by vector data or a linear function (specification, page 6). An understanding of the invention can be derived from a reading of exemplary independent claim 1, which is reproduced as follows:

1. A method of displaying images that resemble each other, comprising the steps of:

extracting image features from images;

dividing a feature space of the image features into sub-spaces having a hierarchical structure;

generating a tree structure having the sub-spaces as nodes thereof;

dividing a display space into a plurality of divided spaces corresponding to the respective sub-spaces by taking into account the tree structure; and

displaying the images in the plurality of divided spaces of the display space, such that any given one of the images displayed in one of the divided spaces of the display space belongs to one of the sub-spaces that corresponds to said one of the divided spaces of the display space.

The Examiner relies on the following reference:

Jain et al. (Jain) 6,121,969 Sep. 19, 2000
(filed Jul. 29, 1997)

Claims 1-18 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jain.

We make reference to the answer (Paper No. 13, mailed June 2, 2004) for the Examiner's reasoning and to the appeal brief

(Paper No. 12, filed March 17, 2004) and the reply brief (Paper No. 14, filed August 2, 2004) for Appellant's arguments thereagainst.

OPINION

Appellant argues that the image search system of Jain finds images that are similar to a referent image and displays them based on their ranking according to a set of criteria (brief, page 5). Referring to Figures 6-9 and their corresponding description, Appellant points out that the search results are navigated through a three-dimensional coordinate system of the displayed images (col. 8, lines 24-26; col. 27, lines 24-30). Appellant further argues that Jain's steps of defining a display space and displaying each display space as a subset of the three-dimensional space based on the user inputs (col. 10, lines 35-41) is not relevant to the claimed "dividing a feature space ... into sub-spaces having a hierarchical structure" (brief, page 7). Additionally, Appellant argues that Jain merely ranks images based on selected criteria and no tree structure is taken into account for dividing the display space (id.).

In response to Appellant's arguments, the Examiner asserts that the display space of Jain, as represented by a subset of the three-dimensional space having a ranked structure, is equivalent

to the claimed hierarchical structure (answer, page 6). The Examiner further asserts that, as shown in Figures 2A and 2B of Jain, "associating an object positionally and visually ... along an axis constitutes a tree structure" (answer, page 7).

A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994). See also Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999).

We observe that Jain relates to displaying images in spaces that are subsets of a three-dimensional space (abstract). Jain ranks the stored images in a database in response to an inquiry by a user such that the relationship of the images are made visible (col. 9, lines 35-49). In fact, images are placed in this three-dimensional perceptual space according to their properties and relative to one another based on their similarities or distinctions (col. 9, lines 49-52). As correctly identified by Appellant, Jain creates a three-dimensional virtual gallery of the images related to the referent image which is placed at the origin of the coordinates (col. 8, lines 24-26).

Additionally, we find that the Examiner has presented no factual basis for interpreting the coordinates of the displayed images as a tree structure (answer, page 7). What a reference teaches is a question of fact. In re Baird, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994) (citing In re Beattie, 974 F.2d 1309, 1311, 24 USPQ2d 1040, 1041 (Fed. Cir. 1992)). In fact, what is shown in Figures 2A and 2B of Jain merely represents how the three different queries define the display space as reflected by the geometric relationship induced by these queries (col. 25, lines 38-45). The only relationship exists between all of the displayed images and the one referent image at the origin of the coordinate axis. Therefore, we agree with Appellant (reply brief, page 2) that these Figures show the selection criteria, not the results in the form of the claimed "sub-spaces" or nodes of a "tree-structure."

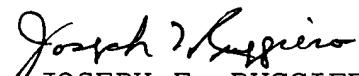
In view of the discussion above, we find that the claimed features of "sub-spaces" as nodes of a "tree structure" and "dividing a display space ... taking into account the tree structure" are absent in Jain. Accordingly, since the Examiner has failed to meet the burden of providing a prima facie case of anticipation, the 35 U.S.C. § 102 rejection of claims 1-18 over Jain cannot be sustained.

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CONCLUSION

To summarize, the decision of the Examiner to reject claims 1-18 under 35 U.S.C. § 102 is reversed.

REVERSED



JOSEPH F. RUGGIERO

Administrative Patent Judge

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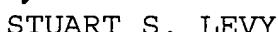
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STUART S. LEVY

Administrative Patent Judge

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MAHSHID D. SAADAT

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